

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



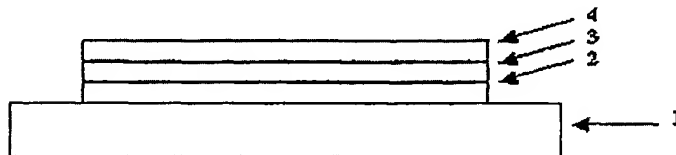
(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/053052 A1

- (51) International Patent Classification⁷: **H01L 51/20**, 51/30
- (21) International Application Number: PCT/GB2004/004883
- (22) International Filing Date: 19 November 2004 (19.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0326853.9 19 November 2003 (19.11.2003) GB
- (71) Applicant (for all designated States except US): **CAMBRIDGE DISPLAY TECHNOLOGY LIMITED** [GB/GB]; Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **PATEL, Nalinkumar** [GB/GB]; Cambridge Display Technology Limited, Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB). **HALLS, Jonathan** [GB/GB]; c/o Cambridge Display Technology Limited, Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB). **ROBERTS, Matthew** [GB/GB]; c/o Cambridge Display Technology Limited, Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB).
- (74) Agent: **ANWAR, Gilani**; c/o Cambridge Display Technology Limited, Building 2020, Cambourne Business Park, Cambridgeshire CB3 6DW (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OPTICAL DEVICE



(57) Abstract: A method of forming an electroluminescent device comprising the steps of: - providing a substrate comprising a first electrode for injection of charge carriers of a first type - forming a semiconducting region by depositing over the substrate a composition comprising a first material for transporting charge carriers of the first type and a second material for emission and transporting charge carriers of the first type; and depositing over the semiconducting region a second electrode for injection of charge carriers of a second type.

WO 2005/053052 A1